

PALM INTRANET

Day : Tuesday
Date: 6/15/2004

Time: 13:20:31

Inventor Information for 10/609151

Inventor Name	City	State/Country
RAGHAVAN, KONDAPURAM VIJAYA	ANDHRA PRADESH	INDIA
KULKARNI, SHIVANAND JANARDAN	ANDHRA PRADESH	INDIA
KISHAN, MOTKURI RADHA	ANDHRA PRADESH	INDIA
SRINIVAS, NAGABANDI	ANDHRA PRADESH	INDIA

[Appln Info](#)[Contents](#)[Petition Info](#)[Atty/Agent Info](#)[Continuity Data](#)[Foreign Data](#)Search Another: Application# or Patent# PCT / / or PG PUBS # Attorney Docket # Bar Code #

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L Number	Hits	Search Text	DB	Time stamp
1	585	540/145	USPAT	2004/06/15 13:19
2	225	tetraspiro or calix	USPAT	2004/06/15 13:19
3	3	540/145 and (tetraspiro or calix)	USPAT	2004/06/15 13:19

ring bonds :

1-2 1-5 1-23 2-3 3-4 4-5 4-6 6-7 6-37 6-40 7-8 7-9 8-11 9-10 10-11
 11-24 12-13 12-16 12-23 13-14 14-15 15-16 15-17 17-18 17-29 17-32 18-19
 18-20 19-22 20-21 21-22 22-24 23-25 23-28 24-33 24-36 25-26 26-27 27-28
 29-30 30-31 31-32 33-34 34-35 35-36 37-38 38-39 39-40

exact/norm bonds :

1-2 1-5 1-23 2-3 3-4 4-5 4-6 6-7 7-8 7-9 8-11 9-10 10-11 11-24 12-13
 12-16 12-23 13-14 14-15 15-16 15-17 17-18 18-19 18-20 19-22 20-21 21-22
 22-24

exact bonds :

6-37 6-40 17-29 17-32 23-25 23-28 24-33 24-36 25-26 26-27 27-28 29-30
 30-31 31-32 33-34 34-35 35-36 37-38 38-39 39-40

isolated ring systems :

containing 1 :

Match level :

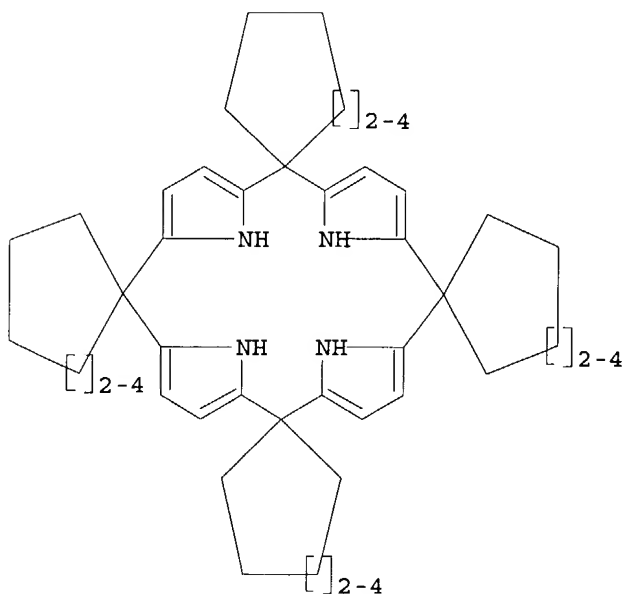
1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:Atom 9:Atom 10:Atom
 11:Atom 12:Atom 13:Atom 14:Atom 15:Atom 16:Atom 17:Atom 18:Atom 19:Atom
 20:Atom 21:Atom 22:Atom 23:Atom 24:Atom 25:Atom 26:Atom 27:Atom 28:Atom
 29:Atom 30:Atom 31:Atom 32:Atom 33:Atom 34:Atom 35:Atom 36:Atom 37:Atom
 38:Atom 39:Atom 40:Atom

L1 STRUCTURE UPLOADED

=> d l1

L1 HAS NO ANSWERS

L1 STR



Structure attributes must be viewed using STN Express query preparation.

=> s l1

SAMPLE SEARCH INITIATED 11:57:48 FILE 'REGISTRY'

SAMPLE SCREEN SEARCH COMPLETED - 125 TO ITERATE

100.0% PROCESSED 125 ITERATIONS 2 ANSWERS
SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE **COMPLETE**
BATCH **COMPLETE**
PROJECTED ITERATIONS: 1830 TO 3170
PROJECTED ANSWERS: 2 TO 124

L2 2 SEA SSS SAM L1

=> s l1 sss full
FULL SEARCH INITIATED 11:57:58 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED - 2359 TO ITERATE

100.0% PROCESSED 2359 ITERATIONS 9 ANSWERS
SEARCH TIME: 00.00.01

L3 9 SEA SSS FUL L1

=> file caplus
COST IN U.S. DOLLARS SINCE FILE TOTAL
ENTRY SESSION
FULL ESTIMATED COST 155.42 155.63

FILE 'CAPLUS' ENTERED AT 11:58:07 ON 15 JUN 2004
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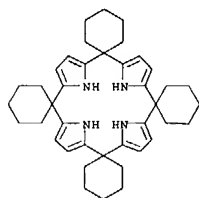
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FILE COVERS 1907 - 15 Jun 2004 VOL 140 ISS 25
FILE LAST UPDATED: 14 Jun 2004 (20040614/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> s l3
L4 25 L3
=> d ibib abs hitstr tot

L4 ANSWER 1 OF 25 CAPLUS COPYRIGHT 2004 ACS on STN
 ACCESSION NUMBER: 2003:128702 CAPLUS
 DOCUMENT NUMBER: 138:394965
 TITLE: New non-covalent charge-transfer complex of calix[4]pyrrole-chloranil: as a potential colorimetric anion sensor
 AUTHOR(S): Shao, Shijun; Guo, Yong; He, Lijun; Jiang, Shengxiang;
 YU, Xianda
 CORPORATE SOURCE: Lanzhou Institute of Chemical Physics, Chinese Academy of Sciences, Lanzhou, 730000, Peop. Rep. China
 SOURCE: Tetrahedron Letters (2003), 44(10), 2175-2178
 CODEN: TELEAY; ISSN: 0040-4039
 PUBLISHER: Elsevier Science Ltd.
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 AB Noncovalent calix[4]pyrrole-chloranil complex, a new class of supramol. assembly, is reported. The formation of the complex is mainly attributed to the charge-transfer interactions between calix[4]pyrrole with electron-rich pyrrole rings and the electron-deficient chloranil subunit. As potential colorimetric anion sensors, the charge-transfer aggregation may be used for effective and selective detection of F⁻ and H₂PO₄⁻ by dramatic visual color changes.
 IT 35320-70-8, meso-Tetracyclohexylcalix[4]pyrrole
 RL: ARG (Analytical reagent use); ANST (Analytical study); USES (Uses) (calix[4]pyrrole-chloranil charge-transfer complex as potential colorimetric anion sensor)
 RN 35320-70-8 CAPLUS
 CN Tetraspiro[21H,23H-porphine-5(15H),1':10(22H),1'':15,1''':20(24H),1''''-tetrakis(cyclohexane)] (9CI) (CA INDEX NAME)

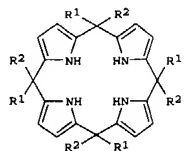


REFERENCE COUNT: 26 THERE ARE 26 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE REFORMAT

L4 ANSWER 2 OF 25 CAPLUS COPYRIGHT 2004 ACS on STN
 ACCESSION NUMBER: 2002:907208 CAPLUS
 DOCUMENT NUMBER: 137:384691
 TITLE: Process for the preparation of novel substituted calix[4]pyrroles over molecular sieve catalysts
 INVENTOR(S): Raghavan, Kondapuram Vijaya; Kulkarni, Shivanand Janardan; Kishan, Motkuri Radha; Srinivas, Nagabandi
 PATENT ASSIGNEE(S): India
 SOURCE: U.S. Pat. Appl. Publ., 11 pp.
 CODEN: USXXCO
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

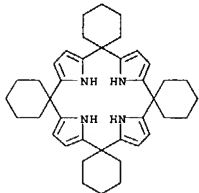
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2002177705	A1	20021128	US 2001-796102	20010228
US 6605194	B2	20030812		

PRIORITY APPLN. INFO.: US 2001-796102 20010228
 OTHER SOURCE(S): CASREACT 137:384691
 GI

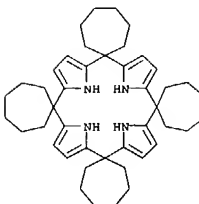


AB Process was disclosed for an eco-friendly, non-corrosive preparation of novel substituted calix[4]pyrroles, such as I [R1 = R2 = Me, Et; R1 = Me, R2 = Et; R1R2 = spiroalkylene (CH₂)₄₋₇, R1R2 = CH(Me)(CH₂)₄], via zeolite mol. sieve catalyzed cyclocondensation of pyrrole with the corresponding ketones, R1COR2. Thus, calix[4]pyrrole I (R1 = R2 = Me) was prepared with 67.5% yield by reacting pyrrole with acetone in dichloromethane using zeolite MCM-41 as catalyst.
 IT 35320-70-8P 405108-19-2P 405108-21-6P
 405108-23-8P
 RL: IMP (Industrial manufacture); SPN (Synthetic preparation); PREP (Preparation) (process for an eco-friendly, non-corrosive preparation of novel substituted calix[4]pyrroles via cyclocondensation of pyrrole with ketones over mol. sieve catalysts)
 RN 35320-70-8 CAPLUS

L4 ANSWER 2 OF 25 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)
 CN Tetraspiro[21H,23H-porphine-5(15H),1':10(22H),1'':15,1''':20(24H),1''''-tetrakis(cyclohexane)] (9CI) (CA INDEX NAME)

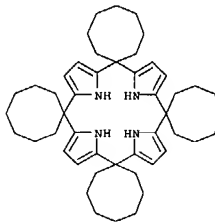


RN 405108-19-2 CAPLUS
 CN Tetraspiro[21H,23H-porphine-5(15H),1':10(22H),1'':15,1''':20(24H),1''''-tetrakis(cycloheptane)] (9CI) (CA INDEX NAME)

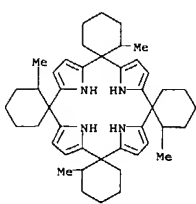


RN 405108-21-6 CAPLUS
 CN Tetraspiro[21H,23H-porphine-5(15H),1':10(22H),1'':15,1''':20(24H),1''''-tetrakis(cyclooctane)] (9CI) (CA INDEX NAME)

L4 ANSWER 2 OF 25 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)



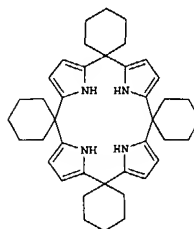
RN 405108-23-8 CAPLUS
 CN Tetraspiro[21H,23H-porphine-5(15H),1':10(22H),1'':15,1''':20(24H),1''''-tetrakis(cyclohexane)], 2',2'',2''',2''''-tetramethyl- (9CI) (CA INDEX NAME)



L4 ANSWER 3 OF 25 CAPLUS COPYRIGHT 2004 ACS on STN
 ACCESSION NUMBER: 2002:676020 CAPLUS
 DOCUMENT NUMBER: 137:201188
 TITLE: Preparation of substituted calix(4)pyrroles over molecular sieve catalysts
 INVENTOR(S): Raghavan, Kondapuram Vijaya; Kulkarni, Shivanand
 PATENT ASSIGNEE(S): Janardan; Kishan, Motkuri Radha; Srinivas, Nagabandi
 SOURCE: Council of Scientific and Industrial Research, India
 PCT Int. Appl., 22 pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002068426	A1	20020906	WO 2001-IN26	20010226
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
GB 2383037	A1	20030618	GB 2002-3655	20010226
EP 1363915	A1	20031126	EP 2001-915651	20010226
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
DE 10195974	T	20040415	DE 2001-10195974	20010226
JP 2004514704	T2	20040520	JP 2002-546053	20010226
US 2002143175	A1	20021003	US 2001-818280	20010327
US 6524446	B2	20030225		
PRIORITY APPLN. INFO.: WO 2001-IN26 W 20010226				
OTHER SOURCE(S): CASREACT 137:201188				
GI				

L4 ANSWER 3 OF 25 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)



I

AB The present invention relates to novel calix pyrroles and a process for synthesis of calix(4)pyrroles by reacting pyrrole with cyclic or acyclic ketones in dichloro methane (DCM) solvent over mol. sieve catalysts which provides an eco friendly, more economical and selective heterogeneous method. Thus, pyrrole, cyclohexanone and zeolite Al-MCM-41 in dichloromethane were refluxed for 10 h to give I in 70.3% yield along with

the dimer, trimer and tetramer.

IT 35320-70-8P 405108-19-2P 405108-21-6P

405108-23-8P

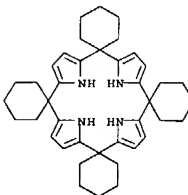
RL: IMF (Industrial manufacture); SPN (Synthetic preparation); PREP

(Preparation)

(preparation of calix(4)pyrroles over zeolite mol. sieve catalysts)

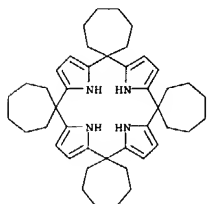
RN 35320-70-8 CAPLUS

CN TetraSpiro[21H,23H-porphine-5(15H),1':10(22H),1'':15,1''':20(24H),1''''-tetrakis(cyclohexane)] (9CI) (CA INDEX NAME)



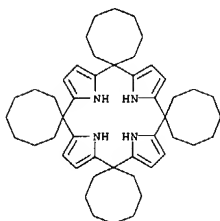
RN 405108-19-2 CAPLUS

L4 ANSWER 3 OF 25 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)
 CN TetraSpiro[21H,23H-porphine-5(15H),1':10(22H),1'':15,1''':20(24H),1''''-tetrakis(cycloheptane)] (9CI) (CA INDEX NAME)



RN 405108-21-6 CAPLUS

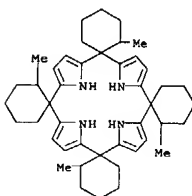
CN TetraSpiro[21H,23H-porphine-5(15H),1':10(22H),1'':15,1''':20(24H),1''''-tetrakis(cyclooctane)] (9CI) (CA INDEX NAME)



RN 405108-23-8 CAPLUS

CN TetraSpiro[21H,23H-porphine-5(15H),1':10(22H),1'':15,1''':20(24H),1''''-tetrakis(cyclohexane)], 2',2'',2''',2''''-tetramethyl- (9CI) (CA INDEX NAME)

L4 ANSWER 3 OF 25 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)



REFERENCE COUNT: 1

THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE

FORMAT

L4 ANSWER 4 OF 25 CAPLUS COPYRIGHT 2004 ACS on STN
 ACCESSION NUMBER: 2002:638268 CAPLUS
 DOCUMENT NUMBER: 137:185360
 TITLE: Preparation, binding properties, and uses of halogenated calixpyrroles, calixpyridinopyrroles and calixpyridines
 INVENTOR(S): Sessler, Jonathan L.; Marquez, Manuel; Anzenbacher, Pavel; Shriver, James A.
 PATENT ASSIGNEE(S): USA
 SOURCE: U.S. Pat. Appl. Publ., 104 pp., Cont.-in-part of U.S. Ser. No. 838,998.
 CODEN: USXXCO
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 2
 PATENT INFORMATION:

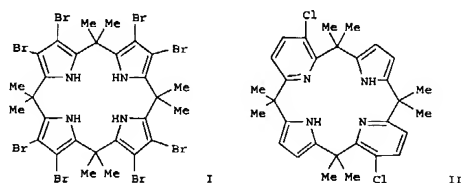
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2002115566	A1	20020822	US 2001-939514	20010824
CA 2391030	AA	19971016	CA 1997 2391030	19970404
US 6262257	B1	20010717	US 1997-833379	19970404
US 2002026047	A1	20020228	US 2001-838998	20010420
WO 2003018548	A2	20030306	WO 2002-US27252	20020826
WO 2003018548	A3	20030703		

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TW
 RN: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.:
 US 1996-14890P P 19960405
 US 1996-24203P P 19960827
 US 1996-26694P P 19960925
 US 1996-33395P P 19961217
 US 1996-33396P P 19961217
 US 1997-833379 A3 19970404
 US 2001-838998 A2 20010420
 CA 1997-2251072 A3 19970404
 US 2001-939514 A 20010824

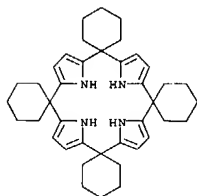
OTHER SOURCE(S): MARPAT 137:185360
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L4 ANSWER 4 OF 25 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)

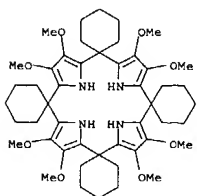


AB Halogenated calixpyrrole, calixpyridinopyrrole, and calixpyridine macrocycles, such as octabromo-meso-octamethylcalix[4]pyrrole (I) and calixpyridinopyrrole II, having 4-12 pyrrolic rings with greater stability were prepared for uses such as dialysis, ion exchange, and environmental remediation. Thus, I was prepared in 90% yield by bromination of the corresponding meso-octamethylcalix[4]pyrrole using N-bromosuccinimide in THF. Enhanced anion, neutral mol. binding affinity and different binding selectivities as compared to their nonhalogenated congeners as judged from
 1H NMR, 19F NMR and fluorescence emission spectroscopic analyses.
 IT 35320-70-8P
 RL: NUU (Other use, unclassified); PEP (Physical, engineering or chemical process); PRP (Properties); PYP (Physical process); SPN (Synthetic preparation); THU (Therapeutic use); BTOL (Biological study); PREP (Preparation); PROC (Process); USES (Uses)
 (preparation and anion binding properties of calixpyrroles, calixpyridinopyrroles and calixpyridines for use environmental remediation, kidney dialysis and cation exchangers)
 RN 35320-70-8 CAPLUS
 CN Tetraaspiro[21H,23H porphine-5(15H),1'':10(22H),1''':15,1''':20(24H),1''''-tetrakis(cyclohexane)] (9CI) (CA INDEX NAME)

L4 ANSWER 4 OF 25 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)

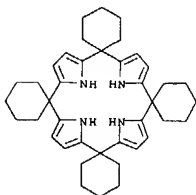


IT 190517-30-7P
 RL: NUU (Other use, unclassified); PEP (Physical, engineering or chemical process); PYP (Physical process); SPN (Synthetic preparation); THU (Therapeutic use); BTOL (Biological study); PREP (Preparation); PROC (Process); USES (Uses)
 (preparation and anion binding properties of calixpyrroles, calixpyridinopyrroles and calixpyridines for use environmental remediation, kidney dialysis and cation exchangers)
 RN 190517 30-7 CAPLUS
 CN Tetraaspiro[21H,23H-porphine-5(15H),1'':10(22H),1''':15,1''':20(24H),1''''-tetrakis(cyclohexane)], 2,3,7,8,12,13,17,18-octamethoxy- (9CI) (CA INDEX NAME)



L4 ANSWER 5 OF 25 CAPLUS COPYRIGHT 2004 ACS on STN
 ACCESSION NUMBER: 2002:316526 CAPLUS
 DOCUMENT NUMBER: 137:59815
 TITLE: Cytosine substituted calix[4]pyrroles: neutral receptors for 5'-guanosine monophosphate
 AUTHOR(S): Sessler, Jonathan L.; Kral, Vladimir; Shishkanova, Tatiana V.; Gale, Philip A.
 CORPORATE SOURCE: Department of Chemistry and Biochemistry and Institute for Cellular and Molecular Biology, University of Texas, Austin, TX, 78712-1167, USA
 SOURCE: Proceedings of the National Academy of Sciences of the United States of America (2002), 99(8), 4848-4853
 CODEN: PNASA6; ISSN: 0027-8424
 PUBLISHER: National Academy of Sciences
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 AB The synthesis and characterization of two cytosine-substituted calix[4]pyrrole conjugates, bearing the appended cytosine attached at either a β - or meso-pyrrolic position, is described. These systems were tested as nucleotide-selective carriers and as active components of nucleotide-sensing ion-selective electrodes at pH 6.6. Studies of carrier selectivity were made using a Pressman-type model membrane system consisting of an initial pH 6.0 aqueous phase, an intervening dichloromethane barrier containing the calix[4]pyrrole conjugate, and a receiving basic aqueous phase. Good selectivity for the Watson-Crick complementary nucleotide, 5'-guanosine monophosphate (5'-GMP), was seen in the case of the meso-linked conjugate with the relative rates of through-membrane transport being 7.7:4.1:1 for 5' GMP, 5'-AMP, and 5'-CMP, resp. By contrast, the β -substituted conjugate, while showing a selectivity for 5'-GMP that was enhanced relative to unsubstituted calix[4]pyrrole, was found to transport 5'-CMP roughly 4.5 times more quickly than 5'-GMP. Higher selectivities were also found for 5'-CMP when both the β - and meso-substituted conjugates were incorporated into polyvinyl chloride membranes and tested as ion selective electrodes at pH 6.6, whereas near-equal selectivities were observed for 5'-CMP and 5'-GMP in the case of
 OF unsubstituted calix[4]pyrroles. These seemingly disparate results are consistent with a picture wherein the meso-substituted cytosine calix[4]pyrrole conjugate, but not its β -linked congener, is capable of acting as a ditopic receptor, binding concurrently both the phosphate anion and nucleobase portions of 5'-GMP to the calixpyrrole core and cytosine "tails" of the mol., resp., with the effect of this binding being most apparent under the conditions of the transport expts.
 IT 35320-70-8
 RL: PRP (Properties)
 (cytosine substituted calix[4]pyrroles as neutral receptors for 5'-GMP and nucleotide monophosphates)
 RN 35320-70-8 CAPLUS
 CN Tetraaspiro[21H,23H-porphine-5(15H),1'':10(22H),1''':15,1''':20(24H),1''''-tetrakis(cyclohexane)] (9CI) (CA INDEX NAME)

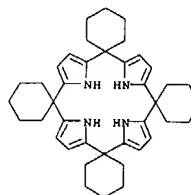
L4 ANSWER 5 OF 25 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)



REFERENCE COUNT: 32 THERE ARE 32 CITED REFERENCES AVAILABLE FOR THIS
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L4 ANSWER 6 OF 25 CAPLUS COPYRIGHT 2004 ACS on STN

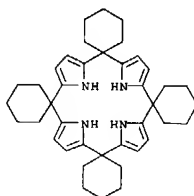
ACCESSION NUMBER: 2001:880994 CAPLUS
 DOCUMENT NUMBER: 137:140505
 TITLE: Synthesis and properties of calix[4]pyrrole macrocycles
 AUTHOR(S): Shao, Shi-jun; Guo, Yong; Jiang, Sheng-xiang; Yu, Xian-da
 CORPORATE SOURCE: Lanzhou Inst. Chem. Phys., Chinese Acad. Sci., Lanzhou, 730000, Peop. Rep. China
 SOURCE: Hecheng Huaxue (2003), 9(5), 436-438, 441
 CODEN: HEHUE2; ISSN: 1005-1511
 PUBLISHER: Hecheng Huaxue Bianjibu
 DOCUMENT TYPE: Journal
 LANGUAGE: Chinese
 OTHER SOURCE(S): CASREACT 137:140505
 AB A series of calix[4]pyrrole macrocycles are synthesized by modified procedure in good yield by condensation of pyrrole with ketones or cyclic ketones. The structure and properties of the calix[4]pyrroles are identified by elemental anal., IR, ¹H NMR, MS and UV spectra.
 IT 35320-70-8P
 RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation) (synthesis and properties of calix[4]pyrrole macrocycles)
 RN 35320-70-8 CAPLUS
 CN Tetra Spiro[21H,23H-porphine-5(15H),1':10(22H),1'':15,1''':20(24H),1''''-tetrakis(cyclohexane)] (9CI) (CA INDEX NAME)



L4 ANSWER 7 OF 25 CAPLUS COPYRIGHT 2004 ACS on STN

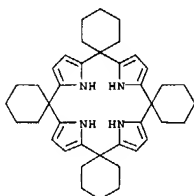
ACCESSION NUMBER: 2001:834766 CAPLUS
 DOCUMENT NUMBER: 136:128303
 TITLE: Effect of the symmetry of the calix[4]pyrrole cavity on sensitivity and selectivity of potentiometric sensors for neutral nitrophenols
 AUTHOR(S): Piotrowski, Tomasz; Radecka, Hanna; Radecki, Jerzy; Depraetere, Stefaan; Dehaen, Wim
 CORPORATE SOURCE: Institute of Animal Reproduction and Food Research of Polish Academy of Sciences, Division of Food Science, Olaszyn, 10-747, Pol.
 SOURCE: Materials Science & Engineering, C: Biomimetic and Supramolecular Systems (2001), C18(1-2), 223-228
 CODEN: MSCREE; ISSN: 0928-4931
 PUBLISHER: Elsevier Science B.V.
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 AB Lipophilic macrocyclic and acyclic derivs. of pyrrole were applied as sensory elements of liquid membrane potentiometric sensors destined for the recognition of neutral forms of nitrophenol isomers. All compds. displayed high ability for the uptake of protons. The potential of liquid membranes, containing pyrrole derivs., strongly depended on the pH of the aqueous phase. Their potentiometric responses generated in the presence of nitrophenol derivs. were studied at three different pH: 4.0, 6.0 and 8.0. All membranes studied responded towards the neutral form of nitrophenol isomers. They did not respond to their anionic forms. The symmetry of the macrocyclic cavity of calix[4]pyrroles had a very mild effect on the mol. recognition of nitrophenol guests. The membranes incorporating macrocyclic pyrrole derivs. generated a higher potentiometric signal in the presence of neutral nitrophenols in comparison to membranes containing acyclic pyrrole derivs. The sensors presented displayed high selectivity for para-nitrophenol.
 IT 35320-70-8
 RL: ARU (Analytical role, unclassified); DEV (Device component use); ANST (Analytical study); USES (Uses) (liquid membrane containing; effect of the symmetry of the calix[4]pyrrole cavity on sensitivity and selectivity of potentiometric sensors for neutral nitrophenols)
 RN 35320-70-8 CAPLUS
 CN Tetra Spiro[21H,23H-porphine-5(15H),1':10(22H),1'':15,1''':20(24H),1''''-tetrakis(cyclohexane)] (9CI) (CA INDEX NAME)

L4 ANSWER 7 OF 25 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)



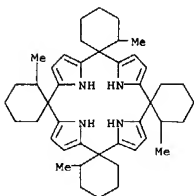
REFERENCE COUNT: 13 THERE ARE 13 CITED REFERENCES AVAILABLE FOR THIS
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L4 ANSWER 8 OF 25 CAPLUS COPYRIGHT 2004 ACS on STN
 ACCESSION NUMBER: 2001:774263 CAPLUS
 DOCUMENT NUMBER: 136:263144
 TITLE: A novel, shape-selective, zeolite-catalyzed synthesis of calix[4]pyrroles
 AUTHOR(S): Kishan, M. Radha; Srinivas, N.; Raghavan, K. V.; Kulkarni, S. J.; Sarma, J. A. R. P.; Vairamani, M.
 CORPORATE SOURCE: Indian Institute of Chemical Technology, Hyderabad, 500007, India
 SOURCE: Chemical Communications (Cambridge, United Kingdom) (2001), (21), 2226-2227
 CODEN: CHCOFS; ISSN: 1359-7345
 PUBLISHER: Royal Society of Chemistry
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 AB Porosity and acidity of mol. sieves Al-MCM-41 (ca. 30 Å pore diameter) play a crucial role in the synthesis of novel calix[4]pyrroles; for the first time, Al-MCM-41 has been used as a solid acid catalyst to produce a number of calix[4]pyrroles with good selectivity and yields, where zeolite HY (ca. 7.6 Å pore diameter) yields mainly the linear chain dimer and no cyclic products.
 IT 35320-70-8P 405108-19-2P 405108-21-6P
 405108-23-8P
 RL: SPN (Synthetic preparation); PREP (Preparation) (shape-selective zeolite-catalyzed synthesis of calix[4]pyrroles)
 RN 35320-70-8 CAPLUS
 CN Tetra Spiro[21H,23H-porphine-5(15H),1':10(22H),1'':15,1''':20(24H),1''''-tetrakis(cyclohexane)] (9CI) (CA INDEX NAME)



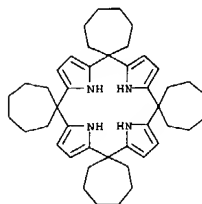
RN 405108-19-2 CAPLUS
 CN Tetra Spiro[21H,23H-porphine-5(15H),1':10(22H),1'':15,1''':20(24H),1''''-tetrakis(cycloheptane)] (9CI) (CA INDEX NAME)

L4 ANSWER 8 OF 25 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)

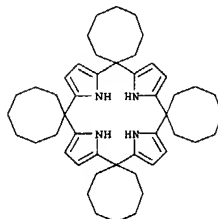


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L4 ANSWER 8 OF 25 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)

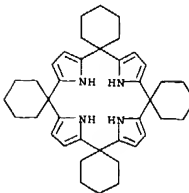


RN 405108-21-6 CAPLUS
 CN Tetra Spiro[21H,23H-porphine-5(15H),1':10(22H),1'':15,1''':20(24H),1''''-tetrakis(cyclooctane)] (9CI) (CA INDEX NAME)



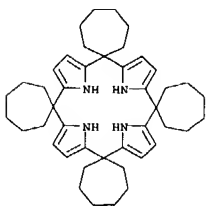
RN 405108-23-8 CAPLUS
 CN Tetra Spiro[21H,23H-porphine-5(15H),1':10(22H),1'':15,1''':20(24H),1''''-tetrakis(cyclohexane)], 2',2'',2''',2'''' tetramethyl- (9CI) (CA INDEX NAME)

L4 ANSWER 9 OF 25 CAPLUS COPYRIGHT 2004 ACS on STN
 ACCESSION NUMBER: 2001:772879 CAPLUS
 DOCUMENT NUMBER: 136:294746
 TITLE: Synthesis of macrocycles using molecular sieve catalysts
 AUTHOR(S): Radha Kishan, M.; Srinivas, N.; Kulkarni, S. J.; Ramakrishna Prasad, M.; Kamalakar, G.; Raghavan, K. V.
 CORPORATE SOURCE: Catalysis Group, Indian Institute of Chemical Technology, Hyderabad, 500 007, India
 SOURCE: Studies in Surface Science and Catalysis (2001), 135(Zeolites and Mesoporous Materials at the Dawn of the 21st Century), 4517-4523
 CODEN: SSETDM; ISSN: 0167-2991
 PUBLISHER: Elsevier Science B.V.
 DOCUMENT TYPE: Journal; [computer optical disk]
 LANGUAGE: English
 AB The authors report the synthesis of macrocycles like calixpyrrole, cyclotrimeratrylene (CTV), cyclotetrameratrylene (CTTV), porphyrin, etc., over mol. sieve as a catalyst. Calixpyrroles are synthesized from pyrrole and ketone like acetone over MCM-41 under reflux conditions using suitable solvent. In case of MCM-41 cyclic calixpyrroles were obtained. On the other hand, due to shape selectivity in case of Y zeolite, linear di-, tri- and tetra-polypyrroles were obtained and cyclic tetramers were not observed. The mechanism of the synthesis of calixpyrrole is either by the dimerization of dimer with simultaneous cyclization to cyclic tetramer or cyclization of linear tetramer via recoil phenomenon.
 IT 35320-70-8P 405108-19-2P 405108-21-6P
 405108-23-8P
 RL: SPN (Synthetic preparation); PREP (Preparation) (preparation of calixpyrrole, cyclotrimeratrylene, cyclotetrameratrylene, and porphyrin over mol. sieve as catalyst)
 RN 35320-70-8 CAPLUS
 CN Tetra Spiro[21H,23H-porphine-5(15H),1':10(22H),1'':15,1''':20(24H),1''''-tetrakis(cyclohexane)] (9CI) (CA INDEX NAME)

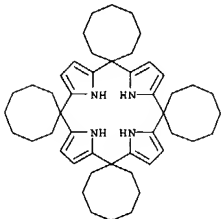


RN 405108-19-2 CAPLUS
 CN Tetra Spiro[21H,23H-porphine-5(15H),1':10(22H),1'':15,1''':20(24H),1''''-tetrakis(cycloheptane)] (9CI) (CA INDEX NAME)

L4 ANSWER 9 OF 25 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)

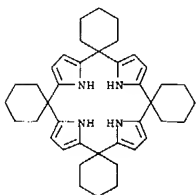


RN 405108-21-6 CAPLUS
CN Tetraaspiro[21H,23H-porphine-5(15H),1':10(22H),1'':15,1''':20(24H),1''''-tetrakisacyclooctane] (9CI) (CA INDEX NAME)



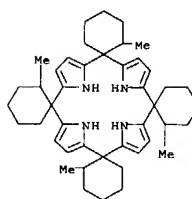
RN 405108-23-8 CAPLUS
CN Tetraaspiro[21H,23H-porphine-5(15H),1':10(22H),1'':15,1''':20(24H),1''''-tetrakisacyclohexane], 2',2'',2''',2''''-tetramethyl- (9CI) (CA INDEX NAME)

L4 ANSWER 10 OF 25 CAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 2001:503365 CAPLUS
DOCUMENT NUMBER: 135:250988
TITLE: Effect of calix[4]pyrrole as addition reagent on anions separation in capillary zone electrophoresis (CZE)
AUTHOR(S): He, Li Jun; Cai, Qing Song; Shao, Shi Jun; Jiang, Sheng Xiang
CORPORATE SOURCE: Lanzhou Institute of Chemical Physics, Chinese Academy of sciences, Lanzhou, 730000, Peop. Rep. China
SOURCE: Chinese Chemical Letters (2001), 12(6), 511-512
CODEN: CCLLET; ISSN: 1001-8417
PUBLISHER: Chinese Chemical Society
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Supramol. interaction of calix[4]pyrroles with several inorg. anions is reported by addition of calix[4]pyrroles to background electrolyte (BGE) in
CZE. The retention time (tR) of all anions increased with increasing concentration of calix[4]pyrroles. The effect on F⁻ is most evident.
IT 35320-70-8
RL: ARU (Analytical role, unclassified); NUU (Other use, unclassified); ANST (Analytical study); USES (Uses)
(effect of calix[4]pyrrole as addition reagent on anions separation in capillary zone electrophoresis)
RN 35320-70-8 CAPLUS
CN Tetraaspiro[21H,23H-porphine-5(15H),1':10(22H),1'':15,1''':20(24H),1''''-tetrakisacyclohexane] (9CI) (CA INDEX NAME)



REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE
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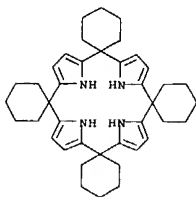
L4 ANSWER 9 OF 25 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)



REFERENCE COUNT: 10 THERE ARE 10 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE
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L4 ANSWER 11 OF 25 CAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 2001:294116 CAPLUS
DOCUMENT NUMBER: 135:76963
TITLE: Highly Reactive Uranium(III) Polypyrrolide Complexes: Intramolecular C-H Bond Activation, Ligand Isomerization, and Solvent Deoxygenation and Fragmentation
AUTHOR(S): Korobkov, Ilia; Gambarotta, Sandro; Yap, Glenn P. A.
CORPORATE SOURCE: Department of Chemistry, University of Ottawa, Ottawa, ON, K1N 6N5, Can.
SOURCE: Organometallics (2001), 20(12), 2552-2559
CODEN: ORGNM7; ISSN: 0278-7333
PUBLISHER: American Chemical Society
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 135:76963
AB The reaction of UX3(THF)4 (X = Cl, I) with the tetraanion of {[(CH2)5]4-calix[4]tetrapyrrole} gave different compds. depending on the
uranium halide, the alkali-metal cation (Li vs K), the stoichiometric ratio of ligand to uranium, and the solvent used. Reaction of the potassium salt of the ligand with uranium iodide in THF and in the ratio 1:1 afforded the dinuclear, tetravalent species {[(CH2)5]4-calix[4]tetrapyrrole}U2(THF)3[2(mu2-O)]2(THF) (1). The source of the bridging oxygen atom is a THF deoxygenation process. A reaction carried out under identical conditions but with the tetralithium salt of the calix[4]tetrapyrrole afforded instead intractable material unless a stoichiometric ratio of two ligands per uranium was employed. In this event, a new species, the dinuclear tetravalent species {[(CH2)5]4-calix[4]tetrapyrrole}U2(THF)2[2.1/2hexane] (2), was isolated.
In this complex, the beta-C atom of one of the pyrrole rings of the macrocycle was deprotonated and metalated by uranium of a second identical unit, thus assembling the dinuclear structure. The reaction is not accompanied by loss of hydrogen gas, while the excess ligand is acting as a Brønsted base. An identical reaction carried out by using uranium trichloride afforded instead the mononuclear tetravalent species {[(CH2)5]4-calix[4]tetrapyrrole}U(OC2H5)(THF)2 (3). In this compound one pyrrole ring was isomerized by shifting the attachment of the chain from the alpha- to the beta-position. The LiOCH2CH3 unit was generated by another pathway of THF fragmentation. Finally, a reaction carried out in dimethoxyethane with the purpose of preventing oxidative attack to the metal center, afforded the mononuclear trivalent complex {[(CH2)5]4-calix[4]tetrapyrrole}U(DME)[K(DME)] (4). The crystal structure of 1-4 were determined
IT 347916-93-2
RL: RCT (Reactant); RACT (Reactant or reagent)
(preparation of highly reactive uranium polypyrrolide complexes and intramol. carbon-hydrogen bond activation, ligand isomerization, and solvent deoxygenation and fragmentation)
RN 347916-93-2 CAPLUS
CN Tetraaspiro[21H,23H-porphine-5(15H),1':10(22H),1'':15,1''':20(24H),1''''-tetrakisacyclohexane], tetrapotassium salt (9CI) (CA INDEX NAME)

L4 ANSWER 11 OF 25 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)

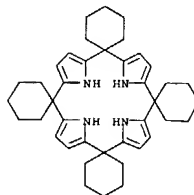


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L4 ANSWER 12 OF 25 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 2001:266067 CAPLUS
DOCUMENT NUMBER: 135:1016:9
TITLE: Potentiometric response of calix[4]pyrrole liquid membrane electrode towards neutral nitrophenols
AUTHOR(S): Piotrowski, Tomasz; Radecka, Hanna; Radecki, Jerzy; Depaetere, Stefaan; Dehaen, Wim
CORPORATE SOURCE: Institute of Animal Reproduction and Food Research, Division of Food Sciences, Polish Academy of Sciences,
Olsztyn, PL-10-747, Pol.
SOURCE: Electroanalysis (2001), 13(4), 342-346
CODEN: ELANEU; ISSN: 1040-0397
PUBLISHER: Wiley-VCH Verlag GmbH
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Calix[4]pyrroles were applied as a new class of ligands of potentiometric sensors for neutral nitrophenol isomers. Calix[4]pyrrole containing liquid membranes exhibit a very high affinity to proton uptake. These membranes, in protonated form, showed very high selectivity towards para-nitrophenol in the presence of other nitrophenols and dihydroxybenzene isomers. The probable mechanism of the potentiometric signal generation of the membrane studied upon stimulation by nitrophenol isomers existing in neutral form is discussed.
IT 35320-70-8
RL: ARU (Analytical role, unclassified); DEV (Device component use); ANST (Analytical study); USES (Uses)
(potentiometric response of calix[4]pyrrole liquid membrane electrode towards neutral nitrophenols)
RN 35320-70-8 CAPLUS
CN Tetraaspiro[21H,23H-porphine-5(15H),1':10(22H),1'':15,1''':20(24H),1''''-tetrakis(cyclohexane)] (9CI) (CA INDEX NAME)

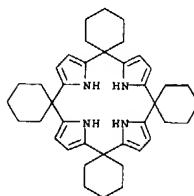


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L4 ANSWER 12 OF 25 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)

L4 ANSWER 13 OF 25 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 2000:728998 CAPLUS
DOCUMENT NUMBER: 134:36381
TITLE: Thallium(I)-selective electrodes based on calix[4]pyrroles
AUTHOR(S): Park, Kyeong Soon; Jung, Sung Ouk; Lee, Shim Sung; Kim, Jae Sang
CORPORATE SOURCE: Department of Chemistry and Research Institute of Natural Sciences, Gyeongsang National University, Jinju, 660-701, S. Korea
SOURCE: Bulletin of the Korean Chemical Society (2000), 21(9), 909-912
CODEN: BKCSDE; ISSN: 0253-2964
PUBLISHER: Korean Chemical Society
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Tl(I) selective electrodes based on meso-alkyl substituted calix[4]pyrroles such as, meso-octamethylcalix[4]pyrrole (L1), meso-octaethylcalix[4]pyrrole (L2) and meso-tetraaspirocyclohexylcalix[4]pyrrole (L3) as sensor mols. were prepared and tested. The conditioned electrode (E4) incorporating L3 gave best results with a wide working concentration range of 10⁻⁵-5.5 .apprx. 10⁻¹ near Nernstian slope of 56.0 mV/decade of activity and detection limit of 10⁻⁶-6.0 M. This electrode exhibited a fast response time of 30 s and high selectivity over Na⁺, K⁺ and other metal ions with only Ag⁺ interfering. The electrode works well in the pH range 2.0-11.0 and can be successfully employed for the determination of Tl⁺. This proposed electrode was also used as an indicator electrode in potentiometric titration of Tl⁺.
IT 35320-70-8
RL: ARU (Analytical role, unclassified); DEV (Device component use); ANST (Analytical study); USES (Uses)
(thallium(I)-selective electrodes based on calix[4]pyrroles)
RN 35320-70-8 CAPLUS
CN Tetraaspiro[21H,23H-porphine-5(15H),1':10(22H),1'':15,1''':20(24H),1''''-tetrakis(cyclohexane)] (9CI) (CA INDEX NAME)



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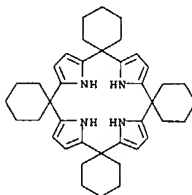
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L4 ANSWER 13 OF 25 CAPLUS COPYRIGHT 2004 ACS ON STN (Continued)

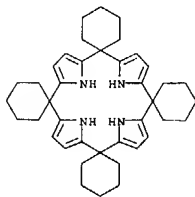
L4 ANSWER 14 OF 25 CAPLUS COPYRIGHT 2004 ACS ON STN
 ACCESSION NUMBER: 2000:26987 CAPLUS
 DOCUMENT NUMBER: 132:180561
 TITLE: Alkylations of resorcarenes and calix[4]pyrroles in phase transfer catalytic systems
 AUTHOR(S): Yan, Chao Guo; Sun, Jing
 CORPORATE SOURCE: Department of Chemistry, Yangzhou University, Yangzhou, 225002, Peop. Rep. China
 SOURCE: Chinese Chemical Letters (1999), 10(12), 989-990
 CODEN: CCLE7; ISSN: 1001-8417
 PUBLISHER: Chinese Chemical Society
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 GI

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB Resorcarenes I (R = Ph, 4-MeOC₆H₄) were fully alkylated with alkylating agents in DMF in the presence of solid KOH as a base and PhCH₂NEt₃⁺ Cl⁻ as a phase-transfer catalyst to give octa-O-alkylated products in 63-82% yields (no data on individual products). Calix[4]pyrroles II (R₁ = R₂ = Me; R₁R₂ = (CH₂)₄, (CH₂)₅) were alkylated with alkyl iodides in CH₂Cl₂/H₂O in the presence of PhCH₂NEt₃⁺ Cl⁻ as a phase-transfer catalyst to give tetra-N-alkylated calix[4]pyrroles in 10-38% yields (no data on individual products).
 IT 35320-70-8
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (preparation of peralkylated calixresorcarenes and calixpyrroles by phase transfer alkylation)
 RN 35320-70-8 CAPLUS
 CN Tetraspiro[21H,23H-porphine-5(15H),1':10(22H),1'':15,1''':20(24H),1''''-tetrakis(cyclohexane)] (9CI) (CA INDEX NAME)

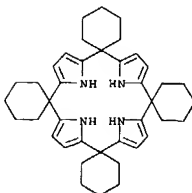


L4 ANSWER 14 OF 25 CAPLUS COPYRIGHT 2004 ACS ON STN (Continued)
 IT 35320-70-8DP, tetra-N-alkylated derivative
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation of peralkylated calixresorcarenes and calixpyrroles by phase-transfer alkylation)
 RN 35320-70-8 CAPLUS
 CN Tetraspiro[21H,23H-porphine-5(15H),1':10(22H),1'':15,1''':20(24H),1''''-tetrakis(cyclohexane)] (9CI) (CA INDEX NAME)



REFERENCE COUNT: 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE
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L4 ANSWER 15 OF 25 CAPLUS COPYRIGHT 2004 ACS ON STN
 ACCESSION NUMBER: 1999:796375 CAPLUS
 DOCUMENT NUMBER: 132:151921
 TITLE: Samarium Hydride, Methyl, and Vinyl Complexes Supported by Calix-tetrapyrrole Ring Macrocycles. Thermal Decomposition to Samarium(II)
 AUTHOR(S): Dube, Tiffany; Gambarotta, Sandro; Yap, Glenn
 CORPORATE SOURCE: Department of Chemistry, University of Ottawa, Ottawa, ON, K1N 6N5, Can.
 SOURCE: Organometallics (2000), 19(2), 121-126
 CODEN: ORGN7; ISSN: 0276-7333
 PUBLISHER: American Chemical Society
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 AB Trivalent Me and vinyl Sm derivs. supported by the calix-tetrapyrrole ligand system (Et₈-calix-pyrrole) (R)Sm(μ₃-Cl)[Li(THF)]₂[Li(THF)]₂ [R = Me (2a), CH₂CH₂ (2b)] were prepared via reaction of (Et₈-calix-pyrrole)(Cl)Sm(Li₂(THF)₃) (1) with the corresponding organolithium reagent. Complex 2a reacts readily with H₂ at room temperature and atmospheric pressure to afford the corresponding Sm hydride (Et₈-calix-pyrrole)(THF)Sm(Li(THF)]₂(μ₃-H) (3). Complexes 2a and 3 are thermally robust. Conversely, the vinyl derivative 2b rapidly and spontaneously decomps. at room temperature to afford the SmI derivative (Et₈-calix-pyrrole)(THF)Sm(Li(THF)]₂[Li(THF)]₂(μ₃-Cl) (4a). The crystal and mol. structures of 2a, 2b, 3 and [-CH₂CH₂-calix-pyrrole](THF)(μ₃-Cl)Sm(Li(THF)]₂[Li(THF)]₂ were determined by x-ray crystallog.
 IT 231948-32-6
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (metathesis with samarium chloro THF complex followed by reduction by lithium)
 RN 231948-32-6 CAPLUS
 CN Tetraspiro[21H,23H-porphine-5(15H),1':10(22H),1'':15,1''':20(24H),1''''-tetrakis(cyclohexane), tetralithium salt (9CI) (CA INDEX NAME)



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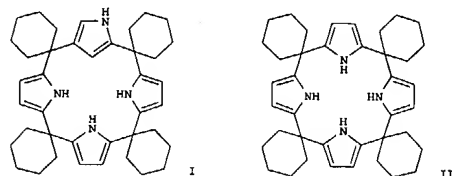
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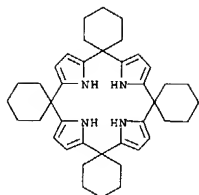
L4 ANSWER 15 OF 25 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)

L4 ANSWER 16 OF 25 CAPLUS COPYRIGHT 2004 ACS on STN
 ACCESSION NUMBER: 1999:768752 CAPLUS
 DOCUMENT NUMBER: 132:137369
 TITLE: N-confused calix[4]pyrroles
 AUTHOR(S): Depaeete, Stefaan; Smet, Mario; Dehaen, Wim
 CORPORATE SOURCE: Department of Chemistry, Katholieke Universiteit
 Leuven, Heverlee, BE-3001, Belg.
 SOURCE: Angewandte Chemie, International Edition (1999),
 38(22), 3359-3361
 CODEN: AClEF5; ISSN: 1433-7851
 PUBLISHER: Wiley-VCH Verlag GmbH
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 OTHER SOURCE(S): CASREACT 132:137369
 GI



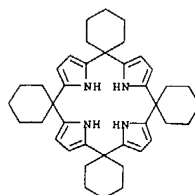
AB N-confused calix[4]pyrroles such as I are prepared as minor products in
 the
 cyclocondensation of cyclohexanone with pyrrole in the presence of acid
 catalysts. E.g., trifluoroacetic acid (7 mol%) is added to an ethanol
 solution of pyrrole and cyclohexanone and the solution heated for 4 h to
 give
 calix[4]pyrrole II in 80% yield along with 17% of the N-confused
 calix[4]pyrrole I. A third regioisomer, believed to be either a single
 regioisomeric doubly N-confused calix[4]pyrrole or a mixture of doubly
 N-confused calix[4]pyrroles, is also formed in up to 36% yield with
 p-MeC₆H₄SO₃H as the acid catalyst.
 IT 35320-70-8P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation of N-confused calix[4]pyrroles as regioisomeric
 byproducts in
 the preparation of calix[4]pyrroles by cyclocondensation of pyrrole
 and
 cyclohexanone or acetone in the presence of an acid catalyst)
 RN 35320-70-8 CAPLUS
 CN TetraSpiro[21H,23H-porphine-5(15H),1':10(22H),1'':15,1''':20(24H),1''''-
 tetrakis(cyclohexane)] (9CI) (CA INDEX NAME)

L4 ANSWER 16 OF 25 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)



REFERENCE COUNT: 27 THERE ARE 27 CITED REFERENCES AVAILABLE FOR
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 RECORD. ALL CITATIONS AVAILABLE IN THE RE
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L4 ANSWER 17 OF 25 CAPLUS COPYRIGHT 2004 ACS on STN
 ACCESSION NUMBER: 1999:348723 CAPLUS
 DOCUMENT NUMBER: 131:102363
 TITLE: Reversible fixation of ethylene on a SmII
 calix-pyrrole complex
 AUTHOR(S): Dube, Tiffany; Gambarotta, Sandro; Yap, Glenn P. A.
 CORPORATE SOURCE: Department of Chemistry, University of Ottawa,
 Ottawa,
 ON, K1N 6N5, Can.
 SOURCE: Angewandte Chemie, International Edition (1999),
 38(10), 1432-1435
 CODEN: AClEF5; ISSN: 1433-7851
 PUBLISHER: Wiley-VCH Verlag GmbH
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 AB Treating [SmI₂(THF)₂] with [(R8-calix-pyrrole)Li₄] [R = Et, (CH₂)₅] in
 THF
 gave paramagnetic, isomorphous enolate deriva., which upon exposure to
 ethylene in hexane gave 39-43% overall yields of paramagnetic
 [[[(R8-calix-pyrrole)](CH₂:CHO)Li][Li(THF)]₂Sm]₂(μ-CH₂CH₂)] (4a, b),
 resp. The structures of 4a and of its corresponding enolate precursor
 were determined by x-ray crystallog.
 IT 231948-32-6
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (preparation and reversible ethylene fixation on samarium
 calix-pyrrole
 complexes)
 RN 231948-32-6 CAPLUS
 CN TetraSpiro[21H,23H-porphine-5(15H),1':10(22H),1'':15,1''':20(24H),1''''-
 tetrakis(cyclohexane)], Tetralithium salt (9CI) (CA INDEX NAME)



● 4 Li

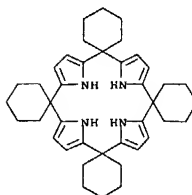
REFERENCE COUNT: 62 THERE ARE 62 CITED REFERENCES AVAILABLE FOR
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 RECORD. ALL CITATIONS AVAILABLE IN THE RE
 FORMAT

L4 ANSWER 18 OF 25 CAPLUS COPYRIGHT 2004 ACS ON STN
 ACCESSION NUMBER: 1999:87254 CAPLUS
 DOCUMENT NUMBER: 130:231353
 TITLE: One and Two Electron Oxidative Pathways Leading to Cyclopropane-Containing Oxidized Porphyrinogens and C-C-Coupled Porphyrinogens from Alkali Cation- and Transition Metal-meso Octaethylporphyrinogen

Complexes
 AUTHOR(S): Crescenzi, Raffaella; Solari, Euro; Floriani, Carlo; Chiesi-Villa, Angiola; Rizzoli, Corrado
 CORPORATE SOURCE: Institut de Chimie Minerale et Analytique BCH, Universite de Lausanne, Lausanne, CH-1015, Switz.
 SOURCE: Journal of the American Chemical Society (1999), 121(8), 1695-1706
 CODEN: JACSAT; ISSN: 0002-7863
 PUBLISHER: American Chemical Society
 DOCUMENT TYPE: Journal
 LANGUAGE: English

AB This report deals with the different transition metal- and alkali cation-assisted oxidation pathways of the meso-octaethylporphyrinogen tetraanion [Et8N4]4-. The two-electron oxidation of [Et8N4Mn(Li(THF)2)2], 4, with Cp2FeBPh4 led to the corresponding monocyclopropane derivative [Et8N4(A)Mn], 6, [A = cyclopropane], while the 1-electron oxidation with CuCl2 or O2 led to the Mn(III) porphyrinogen [Et8N4Mn] [Li(THF)4], 5, which can be further oxidized by an excess of CuCl2 to [Et8N4(A)2Mn-Cl]+[Cu9Cl11]0.5, 7. The formation of 7 does not follow the expected sequence Mn(II) → Mn(III) → Mn(IV)-monocyclopropane → Mn(IV)-biscyclopropane-porphyrinogen. In the case of Fe(II)-porphyrinogen, [Et8N4Fe(Li(THF)2)2], 9, the oxidation led in a preliminary stage to the Fe(III) derivative [Et8N4Fe] [Li(THF)4], 10, then to the metalated form of the biscyclopropane-porphyrinogen [Et8N4(A)2Fe-Cl] [μ-Cu4Cl5], 11. The supposed stabilization of the biscyclopropane by the Cu(I) cluster was ruled out by carrying the oxidation of [Cy4N4Fe(Li(THF)2)2] to [Cy4N4(A)2Fe-Cl] [Cu2Cl4], 14. The stepwise oxidation of [Et8N4M(THF)4] [M = Li, 1; M = Na, 2] with Cp2FeBPh4 led to [Et8N4(A)Li2THF2], 15, [Et8N4(A)Li]BPh4, 16, and [Et8N4(A)Na]BPh4, 17. The reaction of 1 with 16 leading to 15 showed how the C-C moiety in cyclopropane can be engaged in an intermol. electron transfer. The reaction of 17 with 18-crown-6 allowed the release of biscyclopropane-porphyrinogen [Et8N4(A)2]. Particularly interesting is the thermal rearrangement of 15 occurring via intra- and intermol. electron transfers with the transposition of the C-C bond of the cyclopropane to a C-C bridge across the β position of two adjacent pyrroles. In the case of metals, such as Ni(II), which do not undergo oxidation state changes, the primary oxidation product of a metalla-meso-octaethylporphyrinogen is the monocyclopropane derivative, which reacting with the starting material masks an overall 1-electron oxidation. In fact, the reaction of [Et8N4Ni(Li(THF)2)2], 20, with 2 equiv of Cp2FeBPh4 led to the

L4 ANSWER 18 OF 25 CAPLUS COPYRIGHT 2004 ACS ON STN (Continued)
 expected [Et8N4(A)Ni], 21, while the reaction of 20 with 1 equiv of Cp2FeBPh4 led to the dimer [(β-β) (Et8N4)2Ni]2, 22, which forms equally well from the reaction of 20 and 21. Complex 22 is a quite unique metalla-porphyrinogen dimer, where the two monomeric units are joined via a C-C bond in the β position of a pyrrole. Such a reaction shows that the methodol. can accede to oligomeric forms of metalla-porphyrinogens. The crystal structures of 5, 7, 11, 14 and the thermally rearranged product of 15 were detd.
 IT 35320-70-8P
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
 (preparation and reaction with butyllithium)
 RN 35320-70-8 CAPLUS
 CN Tetraspiro[21H,23H-porphine-5(15H),1':10(22H),1'':15,1''':20(24H),1''''-tetrakis(cyclohexane)] (9CI) (CA INDEX NAME)

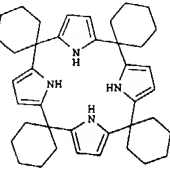
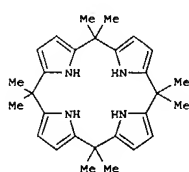


REFERENCE COUNT: 43 THERE ARE 43 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE
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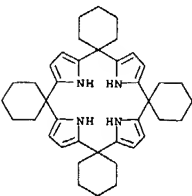
L4 ANSWER 19 OF 25 CAPLUS COPYRIGHT 2004 ACS ON STN
 ACCESSION NUMBER: 1997:684406 CAPLUS
 DOCUMENT NUMBER: 127:346236
 TITLE: Preparation of calixpyrroles, calixpyridinopyrroles and calixpyridines
 INVENTOR(S): Gale, Philip A.; Sessler, Jonathan L.; Genge, John W.; Kral, Vladimir; Andrievsky, Andrei; Lynch, Vincent; Sansom, Petra I.; Allen, William E.; et al.
 PATENT ASSIGNEE(S): Board of Regents, the University of Texas System, USA
 SOURCE: PCT Int. Appl., 145 pp.
 CODEN: PIXXD2
 Patent
 DOCUMENT TYPE: English
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 2
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9737995	A1	19971016	WO 1997-US5643	19970404
W:				
AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, TJ, TM, TR, TT, UA, UG, UZ, VN, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, KE, LS, MM, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
CA 2251072	AA	19971016	CA 1997-2251072	19970404
CA 2391030	AA	19971016	CA 1997-2391030	19970404
AU 9724409	A1	19971029	AU 1997-24409	19970404
EP 891364	A1	19990120	EP 1997-920143	19970404
R: CH, DE, FR, GB, IT, IL, NL, SE				
JP 2000511880	T2	20000912	JP 1997-536364	19970404
PRIORITY APPLN. INFO.:				
			US 1996-14890P	P 19960405
			US 1996-24203P	P 19960827
			US 1996-26694P	P 19960925
			US 1996-33395P	P 19961217
			US 1996-33396P	P 19961217
			CA 1997-2251072	A3 19970404
			WO 1997-US5643	W 19970404

OTHER SOURCE(S): MARPAT 127:346236
 GI



L4 ANSWER 19 OF 25 CAPLUS COPYRIGHT 2004 ACS ON STN (Continued)
 AB Preparation of calixpyrrole, calixpyridinopyrrole, and calixpyridine macrocycles having 4, 5, 6, 7, or 8 heterocyclic rings, such as I and II, was described. Such macrocycles have proved to be effective and selective ion- and neutral mol.-binding agents forming supramol. ensembles, and ion- and neutral mol.-separation agents. The macrocycles are fully meso-non-hydrogen-substituted porphyrinogens, a few mols. of which were previously known but not recognized as possessing anion- or mol.-binding properties. The binding mode is noncovalent, primarily that of hydrogen-bonding, thereby providing a new mode for liquid chromatog., that of hydrogen bonding liquid chromatog. Further useful applications of the macrocycles include environmental remediation by removal of undesired ions or neutral mols., and removal of phosphate for kidney dialysis. Thus, calix[4]pyrrole I was prepared by cyclization of pyrrole and acetone in the presence of MeSO3H, which was added slowly to prevent a violent reaction. II was prepared by reaction of pyrrole with cyclohexanone in the presence of HCl. Stability consta. for I and II were determined to demonstrate their affinity for various ions in solution, e.g. giving a constant of 350 ± 5.5 M-1 for chloride.
 IT 35320-70-8P 177609-71-1P 177609-72-2P
 190517-30-7P
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); NUU (Other use, unclassified); PRP (Properties); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
 (preparation of calixpyrroles, calixpyridinopyrroles and calixpyridines)
 RN 35320-70-8 CAPLUS
 CN Tetraspiro[21H,23H-porphine-5(15H),1':10(22H),1'':15,1''':20(24H),1''''-tetrakis(cyclohexane)] (9CI) (CA INDEX NAME)

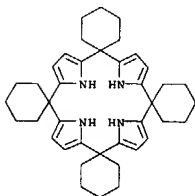


RN 177609-71-1 CAPLUS
 CN Tetraspiro[21H,23H-porphine-5(15H),1':10(22H),1'':15,1''':20(24H),1''''-tetrakis(cyclohexane)], compd. with N,N,N-triethyl-1-butanaminium fluoride

L4 ANSWER 19 OF 25 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)
(1:1) (9CI) (CA INDEX NAME)

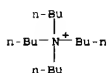
CM 1

CRN 35320-70-8
CMF C40 H52 N4



CM 2

CRN 429 41-4
CMF C16 H36 N . F



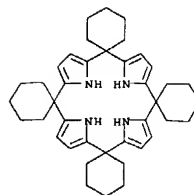
● F⁻

RN 177609 72-2 CAPLUS
CN TetraaSpiro[21H,23H-porphine-5(15H),1':10(22H),1'':15,1''':20(24H),1''''-tetrakis(cyclohexane)], compd. with dichloromethane (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 35320-70-8
CMF C40 H52 N4

L4 ANSWER 19 OF 25 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)

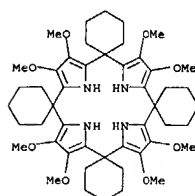


CM 2

CRN 75-09-2
CMF C H2 Cl2

Cl-CH₂-Cl

RN 190517-30-7 CAPLUS
CN TetraaSpiro[21H,23H-porphine-5(15H),1':10(22H),1'':15,1''':20(24H),1''''-tetrakis(cyclohexane)], 2,3,7,8,12,13,17,18-octamethoxy- (9CI) (CA INDEX NAME)



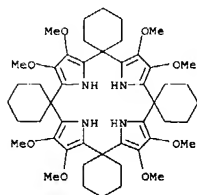
L4 ANSWER 20 OF 25 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 1997:275704 CAPLUS
DOCUMENT NUMBER: 127:17652
TITLE: Calix[4]pyrroles: C-rim substitution and tunability of anion binding strength
AUTHOR(S): Gale, Philip A.; Sessler, Jonathan L.; Allen, William E.; Tvermoes, Nicolai A.; Lynch, Vincent
CORPORATE SOURCE: Department of Chemistry and Biochemistry, University of Texas at Austin, Austin, TX, 78712 1157, USA
SOURCE: Chemical Communications (Cambridge) (1997), (7), 665-666
CODEN: CHCOPS; ISSN: 1359-7345
PUBLISHER: Royal Society of Chemistry
DOCUMENT TYPE: Journal
LANGUAGE: English

AB Electron-rich and electron-deficient C-rim substituted calix[4]pyrroles are synthesized and the anion binding ability of these receptors is found to be dependent upon the C-rim substituents.

IT 190517-30-7P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation and tunability of anion binding strength of calixpyrroles)

RN 190517-30-7 CAPLUS
CN TetraaSpiro[21H,23H-porphine-5(15H),1':10(22H),1'':15,1''':20(24H),1''''-tetrakis(cyclohexane)], 2,3,7,8,12,13,17,18-octamethoxy- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 14 THERE ARE 14 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE REFORMAT

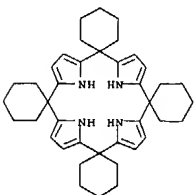
L4 ANSWER 21 OF 25 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 1996:356447 CAPLUS
DOCUMENT NUMBER: 125:103571
TITLE: Lipophilic pyrrole-based tetraazacrown ether as neutral carrier for silver ion-selective electrode
AUTHOR(S): Park, Sang Suk; Jung, Sung Ouk; Kim, Sung Min; Kim, Jae-Sang
CORPORATE SOURCE: Dep. Chem., Gyeongsang National Univ., Jinju, 660-710, S. Korea
SOURCE: Bulletin of the Korean Chemical Society (1996), 17(5), 405-407
CODEN: BKCSDE; ISSN: 0253-2964
PUBLISHER: Korean Chemical Society
DOCUMENT TYPE: Journal
LANGUAGE: English

AB The authors report here a high performance Ag⁺-selective electrode which employs lipophilic tetraazacrown ether of 16-membered rings with 4 pyrrole units (Ionophore I). Ionophore I was synthesized by the acid-catalyzed condensation of pyrrole and cyclohexanones. The typical membrane consisted of 1.5% ionophore I, 33% poly(vinyl chloride) (PVC), 65% plasticizer, 2-nitrophenyl Ph ether (NPPE) or bis(2-ethylhexyl)adipate (BEHA), and 0.5% K tetrakis(p-chlorophenyl)borate (KTpClPB). The membranes were mounted in home-made Ag/AgCl electrode body.

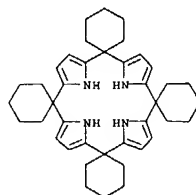
IT 35320-70-8P
RL: ARG (Analytical reagent use); DEV (Device component use); SPN (Synthetic preparation); ANST (Analytical study); PREP (Preparation); USES (Uses)
(preparation and use as neutral carrier for silver ion-selective electrode)

RN 35320-70-8 CAPLUS
CN TetraaSpiro[21H,23H-porphine-5(15H),1':10(22H),1'':15,1''':20(24H),1''''-tetrakis(cyclohexane)] (9CI) (CA INDEX NAME)



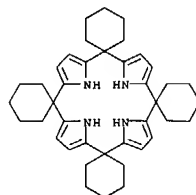
L4 ANSWER 22 OF 25 CAPLUS COPYRIGHT 2004 ACS on STN
 ACCESSION NUMBER: 1995:288186 CAPLUS
 DOCUMENT NUMBER: 125:33102
 TITLE: Calix[4]pyrroles: Old Yet New Anion-Binding Agents
 AUTHOR(S): Gale, Philip A.; Sessler, Jonathan L.; Kral, Vladimir;
 Lynch, Vincent
 CORPORATE SOURCE: Department of Chemistry and Biochemistry, University
 of Texas, Austin, TX, 78712-1167, USA
 SOURCE: Journal of the American Chemical Society (1996),
 118(21), 5140-5141
 CODEN: JACSAT; ISSN: 0002-7863
 PUBLISHER: American Chemical Society
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 AB The octaalkylporphyrinogens, octamethylcalix[4]pyrrole (i.e.,
 5,10,15,20,22,24-hexahydro-5,5,10,10,15,15,20,20-octamethyl-21H,23H-
 porphine, I) and tetraspirocyclohexylcalix[4]pyrrole (II), have been
 found to be effective anion binding agents both in solution and in the
 solid state. Evidence for anion binding in the solid state derives from single
 crystal x-ray diffraction analyses with structures of the chloride
 complex of I and the fluoride complex of II being explicitly obtained. In these
 structures, the calix[4]pyrrole ligands are found in cone-like
 conformations such that the pyrrole NH protons can coordinate to the
 bound halide anions via hydrogen bonds. By contrast, x-ray structural analyses
 of the free receptors show that, in the absence of anions, compds. I and
 II adopt 1,3-alternate conformations in the solid state. Proton NMR
 titration studies, carried out in dichloromethane-d₂ solution, reveal
 that both compound are selective for fluoride over a variety of other anions (viz.,
 Cl⁻, Br⁻, I⁻, H₂PO₄⁻ and HSO₄⁻).
 IT 35320-70-8
 RL: PRP (Properties); RCT (Reactant); RACT (Reactant or reagent)
 (complexation behavior of calix[4]pyrroles (porphines) with anions)
 RN 35320-70-8 CAPLUS
 CN Tetraspiro[21H,23H-porphine-5(15H),1':10(22H),1'':15,1''':20(24H),1''''-
 tetrakis(cyclohexane)] (9CI) (CA INDEX NAME)

L4 ANSWER 22 OF 25 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)



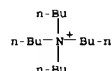
IT 177609-71-1P 177609-72-2P
 RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)
 (complexation behavior of calix[4]pyrroles (porphines) with anions)
 RN 177609-71-1 CAPLUS
 CN Tetraspiro[21H,23H-porphine-5(15H),1':10(22H),1'':15,1''':20(24H),1''''-
 tetrakis(cyclohexane)], compd. with N,N,N-tributyl-1-butanaminium fluoride
 (1:1) (9CI) (CA INDEX NAME)

CM 1
 CRN 35320-70-8
 CMF C40 H52 N4



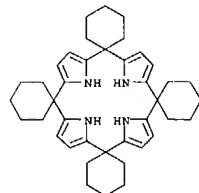
CM 2
 CRN 429-41-4
 CMF C16 H36 N . F

L4 ANSWER 22 OF 25 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)



● F⁻

RN 177609-72-2 CAPLUS
 CN Tetraspiro[21H,23H-porphine 5(15H),1':10(22H),1'':15,1''':20(24H),1''''-
 tetrakis(cyclohexane)], compd. with dichloromethane (1:1) (9CI) (CA INDEX
 NAME)
 CM 1
 CRN 35320-70-8
 CMF C40 H52 N4



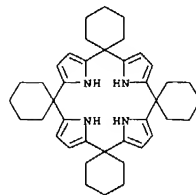
CM 2
 CRN 75-09-2
 CMF C H2 Cl2

Cl⁻ CH₂ Cl

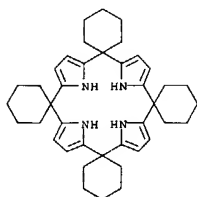
L4 ANSWER 23 OF 25 CAPLUS COPYRIGHT 2004 ACS on STN
 ACCESSION NUMBER: 1995:994644 CAPLUS
 DOCUMENT NUMBER: 124:32254
 TITLE: Transparent, heat-sensitive recording sheets
 INVENTOR(S): Podszus, Wolfgang; Herrmann, Udo
 PATENT ASSIGNEE(S): Agfa-Gevaert AG, Germany
 SOURCE: Ger. Offen., 7 pp.
 CODEN: GWXXBX
 DOCUMENT TYPE: Patent
 LANGUAGE: German
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 4407905	A1	19950914	DE 1994-4407905	19940309

PRIORITY APPLN. INFO.: DE 1994-4407905 19940309
 AB The title sheets, giving prints with high optical d. and good thermal
 stability, comprise transparent carriers bearing layers containing
 aromatic
 compds. containing N and/or O, mono-, oligo-, or polysaccharides,
 catalysts,
 and binders. A 63-µm PET film was coated with an aqueous mixture of
 fructose
 3.5, p-MeC₆H₄SO₃H 1.0, and polyvinyl alc. 0.5 g/m², dried, coated with a
 mixture of 1.0 g/m² polyvinyl butyral and 0.5 g/m² indole in MEK, dried,
 coated with a solution of 1.4 g/m² polycarbonate, and dried to give a
 sheet
 giving thermal prints with optical d. 0.05 and 0.06 after 0 and 24 h,
 resp., at 45°; and d. of dark and light areas 0.81 and 0.08, resp.,
 after being dried at 150°.
 IT 35320-70-8
 RL: TEM (Technical or engineered material use); USES (Uses)
 (coatings; transparent, heat-sensitive recording sheets)
 RN 35320-70-8 CAPLUS
 CN Tetraspiro[21H,23H-porphine-5(15H),1':10(22H),1'':15,1''':20(24H),1''''-
 tetrakis(cyclohexane)] (9CI) (CA INDEX NAME)



L4 ANSWER 24 OF 25 CAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 1975:531555 CAPLUS
DOCUMENT NUMBER: 83:131555
TITLE: New porphingen type compound
AUTHOR(S): Tsuge, O.; Tashiro, M.; Kikyu, Y.
CORPORATE SOURCE: Res. Inst. Ind. Sci., Kyushu Univ., Fukuoka, Japan
SOURCE: Organic Preparations and Procedures International
(1975), 7(1), 39-42
CODEN: OPPIAK; ISSN: 0030-4948
DOCUMENT TYPE: Journal
LANGUAGE: English
GI For diagram(s), see printed CA Issue.
AB Cyclohexenylpyrroles (I, II) were treated with HCl to give porphingens
(III, IV, resp.) but remained unchanged with p-MeC6H4SO3H, whereas
pyrrole reacted with cyclohexanone in the presence of p-MeC6H4SO3H to give a
mixture of III and IV.
IT 35320-70-8P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)
RN 35320-70-8 CAPLUS
CN Tetraspiro[21H,23H-porphine-5(15H),1':10(22H),1'':15,1''':20(24H),1''''-
tetrakis(cyclohexane)] (9CI) (CA INDEX NAME)



L4 ANSWER 25 OF 25 CAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 1972:85630 CAPLUS
DOCUMENT NUMBER: 76:85630
TITLE: Condensation of cyclohexanone with furan and pyrrole
AUTHOR(S): Brown, W. H.; Hutchinson, B. J.; MacKinnon, M. H.
CORPORATE SOURCE: Dep. Chem., Univ. Guelph, Guelph, ON, Can.
SOURCE: Canadian Journal of Chemistry (1971), 49(24), 4017-22
CODEN: CJCHAG; ISSN: 0008-4042
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Several compds. formed by the acid-catalyzed condensation of
cyclohexanone
with furan and pyrrole were isolated and identified. A previously
reported structure for one of the products of the condensation of
cyclohexanone with pyrrole was incorrect.
IT 35320-70-8P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)
RN 35320-70-8 CAPLUS
CN Tetraspiro[21H,23H-porphine-5(15H),1':10(22H),1'':15,1''':20(24H),1''''-
tetrakis(cyclohexane)] (9CI) (CA INDEX NAME)

